

REMARKS

[001] The Office Action cites the following art: U.S. Patent Number JP 4-221474A to *Ogawa et al* (hereinafter *Ogawa*); U.S. Patent Number 5,184,265 to *Foote et al* (hereinafter *Foote*); and U.S. Patent Number 6,391,216 to *Nakatani* (hereinafter *Nakatani*).

[002] Claims 1-10 and 20-24 are withdrawn due to a restriction requirement. The applicant has previously argued to traverse this requirement. Claims 11-19 are pending in the case. In addition, Applicant submits new Claims 25-29 with this Office Action Response. Claims 11 and 25 are independent claims. Claims 11, 13, 14, and 18 are rejected under 35 USC § 102(b) as unpatentable over *Ogawa*. Claim 12 is rejected under 35 USC § 103(a) as unpatentable over the combination of *Ogawa*, *Foote*, and *Nakatani*.

[003] The Office Action stated that Claims 15-17 and 19 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening Claims. Consequently, Applicant added Claims 25-29. Claim 25 incorporates the limitations of allowable dependent Claim 15 into a single claim including all the limitations of base Claim 11 and intervening Claim 14. Claims 26-27 and 29 include the same allowable subject matter of Claims 16-7 and 19 respectively, except that each depends from the new allowable independent Claim 25. Claim 28 contains the same limitations as Claim 18 except that it now depends from new independent Claim 25. Applicants submit that Claim 28 is allowable as depending from an allowable independent claim. The new claims use the original language of Claims 11, 14, and 15-19 and thus do not add any new subject matter.

[004] The Applicant submits the attached amendments and remarks and respectfully requests that all rejections be withdrawn and that the claims be allowed.

REJECTION OF CLAIMS 11, 13, 14, AND 18 UNDER 35 USC § 102(b)Claim 11

[005] It is well settled under 35 U.S.C. §102 that “an invention is anticipated if . . . all the claim limitations [are] shown in a single art prior art reference. Every element of the claimed invention must be literally present, arranged as in the claim. The identical invention must be shown in as complete detail as is contained in the patent claim.” *Richardson v. Suzuki Motor Co., Ltd.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Applicant respectfully asserts that *Ogawa* does not teach or disclose each element of the Claims 11, 13, 14, and 18.

[006] Claim 11 recites:

11. A micromechanical actuator for a storage device, comprising:
a read/write slider;
a movable member formed as an integral part of the read/write slider; and
an electro-thermal actuator element in contact with the movable member, to effect relative positioning of the read/write slider.

[007] *Ogawa* does not anticipate “a movable member formed as an integral part of the read/write slider.” Rather, *Ogawa* teaches the heating of a spring arm **attached** to a head. The spring arm itself thermally expands. *Ogawa*, abstract. *Ogawa* teaches a device that supports a hard disk. *Ogawa*, abstract; Figs. 1, 2. In contrast, Claim 11 recites a movable member formed as part of a hard disk head. The movable member of Claim 11 does not support the head, but is an integral part of the head. Claim 11, Fig. 5.

[008] The Office Action states that the read/write slider of Claim 11 is equivalent to the head 14 of *Ogawa*. Office Action mailed 14 December 2005 (hereinafter OA), §1. Applicant agrees that the read/write slider and the head 33 of *Ogawa* are equivalent and will use the term head to refer to both.

[009] The Office Action further states that the movable member of Claim 11 is equivalent to the "head supporting spring mechanism" "13 (including 34 in Fig. 8)" of *Ogawa*. OA, §1. Applicants respectfully disagree. The movable member is not equivalent to the "head supporting spring mechanism" 13/34 for three reasons. **First**, the movable member does not support the head as does the spring mechanism. **Second**, the movable member is **formed** as an integral part of the head while the head supporting spring mechanism is a distinct piece, formed of distinct material. **Third**, as emphasized in Claim 13, the movable member is movable due to the fact that only "one end" is connected to the head. (See Fig. 1, Claim 13).

[010] **Movable member does not support the head:** The term "head supporting spring mechanism" structurally indicates that element 13 must support something. The *Ogawa* abstract in naming element 13 states element 13 **supports the head**. *Ogawa* abstract. *Ogawa* teaches a spring mechanism that supports a head. Claim 11 recites a head having a movable member formed as part of the head. The **movable member does not support the head** and is therefore not equivalent to the spring mechanism.

[011] Typically, in hard disk design, a flexible arm is used to support a hard disk head. *Ogawa* abstract (the spring arm of a head supporting spring mechanism 13/34); *Ogawa* Figs. 1, 4, 7, 6, 7; see also the published version of the present invention, US 2003/0035237 (hereinafter *Lille*), ¶ 33. As shown in *Ogawa* Figure 4, the hard disk arm 12 supports the head supporting spring mechanism 13/34. The head supporting spring mechanism 13/34 in turn supports the head 14. *Ogawa* teaches that the head supporting spring mechanism 13/34 supports the head 14. *Ogawa* abstract; Fig. 4. *Ogawa* teaches that the spring mechanism and the head are separate elements with one supporting the other. *Ogawa* abstract, Fig. 4.

[012] The stated goal of *Ogawa* is “to enhance rapid response of a head and to control each head by providing a thermoelectric wire at a spring arm.” *Ogawa* abstract-purpose. The wire connected to the *Ogawa* device is connected to the spring arm, not to the head. The spring arm supports the head and is not equivalent to the head.

[013] **Movable member is formed as an integral part of the head:** Under the doctrines of Claim interpretation and Claim differentiation, each limitation of a claim must relate to a separate structure or element. Claim 11 sets forth a head having a movable member. *Ogawa* teaches a head supported by a spring mechanism. The spring mechanism supports and positions the head. The movable member is formed as integral to the head, does not support the head, and allows the head to position itself. The word “formed” suggests a method of manufacture that creates the movable member from the material of the head as described in the specification of the present application. *Ogawa* does not teach a movable member formed as an integral part of the head. Therefore, the movable member and the spring mechanism cannot be equivalent. Consequently, *Ogawa* does not anticipate Claim 11 of the present invention.

Claim 13

[014] **Claim 13** is allowable for the same reasons cited above with respect to Claim 11. In addition, *Ogawa* does not teach a movable member attaching at one end to a hard disk head. Rather, *Ogawa* teaches a movable member that attaches to a head supporting spring mechanism 13. Claim 13 emphasizes that the movable member is a “free-standing structure.” Claim 13. One end of the free-standing structure is attached to the head. Claim 13. The other end is free-standing. Claim 13. However, spring mechanism 13/34 of *Ogawa* is not free-standing in any way. One end of the spring mechanism 13/34 is connected to the head while the other end is connected to a hard disk arm element 12. The spring mechanism 13/34 is not free standing and

thus does not anticipate the limitation of Claim 13. Consequently, Claim 13 is not anticipated by *Ogawa*.

Claim 14

[015] The Office Action states that *Ogawa* "shows" a movable member further comprising "a proximal end and a distal end, the proximal end integrally attached to the slider body ..." The Office Action fails to make any citation to the prior art to support this assertion and as such does not establish a *prima facie* case under §102.

[016] If the Office Action relies on the arguments against Claim 11 in rejecting Claim 14, then no *prima facie* case is established. *Ogawa* fails to teach a movable member integrally attached to the hard disk head. The Examiner asserts that the spring mechanism 13/34 is formed as an integral part of the head. This is not the case. As shown in *Ogawa* Figures 2 and 4, *Ogawa* teaches that the head and the spring mechanism 13/34 are separate structures. In addition, Claim 14 requires that the distal end of the movable arm be free-standing. In *Ogawa*, the spring mechanism 13/34 is not free standing. One end of the spring mechanism attaches to and supports the head while the other end attaches to a hard disk arm element 12.

[017] The words of Claim 14 are important. Claim 14 requires that the proximal end of the movable member be integrally attached to the head. However, *Ogawa*'s spring arm 34 does not touch the head of *Ogawa* at all. In addition, the Office Action fails to cite any free-standing elements from *Ogawa*.

[018] Claim 14 is allowable for the same reasons cited above with respect to Claim 11. In addition, Claim 14 distinctly claims that the movable member connects directly to the hard disk head. Claim 14 is allowable as *Ogawa* does not teach a movable member whose proximal end attaches to a read/write head and whose distal end is free-standing.

Claim 18

[019] **Claim 18** is allowable for the same reasons cited above with respect to Claim 11.

[020] Applicant submits that Claim 11 is patentable over *Ogawa*. In addition Claims 13, 14, and 18 depend from Claim 11 and are allowable as depending from an allowable Claim. Claims 12-14 are also allowable for the additional reasons stated above.

REJECTION OF CLAIM 12 UNDER 35 USC § 103(a)

[021] To establish a *prima facie* case of obviousness, the combination of prior art references must teach or suggest all the claim limitations. MPEP §2142. In addition, "it is insufficient that the prior art disclose[] the components of the patented device, either separately or used in other combinations; there must be some teaching, suggestion, or incentive to make the combination made by the inventor." *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 934 (Fed. Cir. 1990).

[022] Applicant submits that Claim 11 is allowable for the reasons set forth above and that Claim 12 is allowable as depending from an allowable claim. In addition, the combination of *Ogawa*, *Foote*, and *Nakatani* fail to teach all the limitations of Claim 12. Specifically, the cited art does not teach a movable member formed as an integral part of the hard disk head. As explained above, *Ogawa* teaches a spring mechanism 13/34 attached to a head, but not formed as an integral part of the head. The spring mechanism of *Ogawa* supports the head while the movable member of Claim 12 does not support the head. Consequently, Applicant submits that Claim 12 is allowable.

New Claims

[023] New independent Claim 25 incorporates all of the limitations of Claim 15, 14, and 11. The Office Action stated that Claim 15 would be allowable if written in independent form. Applicant submits that Claim 25 incorporates all of the limitations of Claim 15 and is allowable.

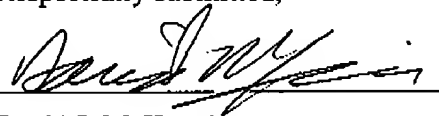
[024] New Claims 26-28 incorporate the limitations of Claims 16-19, respectively. Applicant submits that Claims 16-19 are allowable in that they now incorporate the subject matter of the Claims 16-19 which were objected to on the grounds that they did not depend from an allowable independent claim.

CONCLUSION

[025] In view of the foregoing, Applicant submits that the application is in condition for allowance. In the event any questions or issues remain that can be resolved with a phone call, Applicant respectfully requests that the Examiner initiate a telephone conference with the undersigned.

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Respectfully submitted,


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